

What is claimed is:

1. A fixing apparatus for fixing a toner image on a transfer sheet, comprising:

a fixing roller comprising

a cylindrical light-transmitting base body capable of transmitting a heat ray;

a light-transmitting elastic layer including

a first light-transmitting elastic layer provided on an outer periphery of said light-transmitting base body and made of a material having a hardness A1, and

a second light-transmitting elastic layer provided on an outer periphery of said first light-transmitting elastic layer and made of a material having a hardness A2; and

a heat ray absorbing layer provided on an outer periphery of said light-transmitting elastic layer and to absorb said heat ray.

2. The fixing apparatus of claim 1, wherein the hardness A1 is greater than the hardness A2.

3. The fixing apparatus of claim 1, wherein the material of at least one of the first light-transmitting elastic layer

and the second light-transmitting elastic layer is a silicone rubber.

4. The fixing apparatus of claim 1, wherein a thickness T1 of the first light-transmitting elastic layer is not larger than a thickness T2 of the second light-transmitting elastic layer.

5. The fixing apparatus of claim 1, further comprising:
a bearing to support the fixing roller rotatably, said bearing provided on an outer periphery of said light-transmitting elastic layer or an outer periphery of said heat ray absorbing layer.

6. The fixing apparatus of claim 5, further comprising:
a heat insulating member to intercepting heat transmission from said light-transmitting elastic layer or said heat ray absorbing layer to said bearing, wherein said heat insulating member is provided on an outer periphery of said light-transmitting elastic layer or an outer periphery of said heat ray absorbing layer and said bearing is provided on an outer periphery of said heat insulating member.

7. The fixing apparatus of claim 6, wherein a material of said bearing has a heat deformation temperature higher than 200 °C under a load of 18.6 Kg/cm².

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